## **EPA Official Record**

Mail ID: bc94f56c705649b7923da28e38503400

**From:** Jetter, James **To:** Bloomer, Bryan

Copy To: Moss, Jacob; John Mitchell

**Delivered Date:** 10/07/2014 11:12 AM EDT

Subject: Electric power for cooking

Bryan,

Regarding your question on electric power needed for cooking, I previously sent some info (below) to Jacob, fyi...

Jim

From: Jetter, James

Sent: Saturday, August 30, 2014 2:51 PM

To: Moss, Jacob; Mitchell, John

**Subject:** RE: draft presentation for Administrator

Jacob,

Some solar panel systems sold in the developing world would have enough wattage to power off-grid induction stoves, but the cost would be prohibitive.

For comparison, the BioLite stove produces 2 W (Watts) of DC (direct current).

An induction cooker would require about 1000 W (1 kW) of AC (alternating current).

Wholesale cost of solar panels is about \$1 per Watt: <a href="http://www.wholesalesolar.com/solar-panels.html">http://www.wholesalesolar.com/solar-panels.html</a>

But induction cookers require AC, so an inverter system would be required. The cost for a 1 kW system (not including a battery bank) is about \$6,000:

http://www.wholesalesolar.com/products.folder/systems-folder/OffGridPackages.html

Regards,

Jim

From: Moss, Jacob

Sent: Thursday, August 21, 2014 3:59 PM

**To:** Mitchell, John; Jetter, James

**Subject:** RE: draft presentation for Administrator

Jim, in addition to the other points John and you might have discussed, do you have any insight on the basic question of whether or not smaller solar panels sold in the developing world would have enough wattage to power off-grid induction stoves? Have a great trip to China! - Jacob